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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,842	03/09/2001	Martin Roderick Lea	CQ10057	6532
23493	7590	09/20/2004	EXAMINER	
SUGHRUE MION, PLLC			PHAM, BRENDA H	
401 Castro Street, Ste 220			ART UNIT	
Mountain View, CA 94041-2007			PAPER NUMBER	

2664

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/786,842	Applicant(s) LEA, MARTIN RODERICK	
	Examiner Brenda Pham	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 09 March 2001.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) 11-15 is/are allowed.

6) ☒ Claim(s) 1 and 6-9 is/are rejected.

7) ☒ Claim(s) 2-5 and 10 is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on 09 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Detailed Action

1. Claims 1-15 have been examined.

Claim Objections

2. Claim 2 is objected to because of the following informalities: claim 2, line 5 recite
“a bridge in the group” should it be –the bridge in the group--.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 6-8 are rejected under 35 U.S.C 102(b) as being anticipated by
Tsukakoshi et al (US 5,018,133).

Claim 1, **Tsukakoshi et al** discloses a bridge {**bridge 6 (6A-6C) see figure 4**} for use in a group of bridges (**bridge 1 see figure 1-3 and 12**) in a communications network, the communications network having a number of communications devices (**Terminal 4**) coupled together via a number of bridges (**6A-6C, 3AD, 3BE, 3BF, 3BC and 3EF**) and operating in accordance with a Spanning Tree Protocol (STP) {**The Spanning Tree Protocol (STP) is a method described in the IEEE 802.1D standard for controlling**

bridging paths through a network, (see column 1, line 15-20 of Tsukakoshi et al)),
the bridge comprising:

a number of interconnectable ports **{inherently included in any of bridges 6A-6C for coupling to a transmitting and receiving circuit, reference numeral 7B of figure 4, for interconnected between the bridge 6 and sub-LAN 2 (column 4, line 43-44))};**

a group port **{inherently included in any of bridge 6A-6C}** which couples the grouped bridge **(1)** to a corresponding group port of at least one other grouped bridge **(any of bridge 6A-6C)** via a group link **(LAN 5)**, the group link being provided to allow ports on different grouped bridges to be interconnected **(see figures 1, 4 and column 4); and,**

a processor **(8 of figure 4)**, the processor being adapted to communicate with other bridges on the network using Bridge Protocol Data Units (BPDUs) **(the Hello message 30)** to allow an optimum path through the network to be determined, wherein the optimum path is determined in accordance with path cost components which represent the ability of respective ports to transfer data.

{Tsukakoshi teaches the processor 8 being adapted to communicate with other bridges on the network using a Hello message 30. The Hello message 30 consists a root ID 33 indicating the bridge is the transmitter of the Hello message, a Root Path Cost 34 indicating the path cost, which is rewritten at each of the bridges. The root path cost in the Hello message indicates the path cost up to the bridge, to which the Hello message has been relayed, the value of the root

path cost being zero at the point of time where the root bridge has transmitted the Hello message. The value of the path cost of the message passing through each of the bridges is given in advance, which value is added to the value of the root path cost contained in the Hello message before the relay thereof. Further, the value of the updated root path cost stated above is memorized in the bridge as the root path cost from the bridge itself to the root bridge. When the root path cost written in the received Hello message is lower than the root path cost, which the bridge itself has memorized, the relevant bridge decides to be a backup bridge for the LAN, which the Hello message has just passed through. When the root path cost written in the received Hello message is Higher than the root path cost, which the bridge itself has memorized, the relevant bridge is a designated bridge for the LAN, which the Hello message has just passed through. The Hello message is written to determine the optimum path cost through the network, (column 6, 7, lines 43-67, 1-13, respectively).}

{Note: Backes et al (US 5,018,137) recite that "the spanning tree algorithm is for the bridges to exchange configuration message, called "hello" messages or bridge protocol data units (BPDUs) with the other bridges" (column 6, lines 10-15).}

Therefore, "hello" message in Tsukakoshi is the Bridge Protocol Data Units (BPDUs) recited in the claim.

Claim 6, **Tsukakoshi** further teaches a bridge according to claim 1, wherein the bridge includes a transfer store (**a buffer memory 9**) which stores data received at one of the ports before transferring the data to one or more of the other ports (column 4, lines. {"**The transmitting and receiving circuit 7A relays a frame received from the input side 5a of the main LAN to the output side 5b and at the same time sends a copy of the received frame to a buffer memory 9**" (column 4, lines 48-52).}

Claim 7, **Tsukakoshi** further teaches a group of bridges comprising a number of bridges (6A-6C) according to claim 1, the bridges being coupled via a group link (**LAN 5**) which interconnects the group ports (**inherently include in bridges 6A-6C**) on different bridges in the group (**see figures 1-3**).

Claim 8, **Tsukakoshi** teaches a group of bridges according to claim 7 wherein the bridge identifier of each bridge in the group of bridges is identical. {"**the first bridges and the main LAN 5 constitutes a logical bridge 1, as indicated in FIG. 2, by giving each of the first bridges 6A to 6C a same Idin the network**" (column 4, lines 25-27)}.

5. Claim 9 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsukakoshi et al (US 5,018,133).

Claim 9, Tsukakoshi et al also teach a group of bridges according to claim 8, wherein each bridge has a respective MAC address, the bridge identifier of each

grouped bridge being determined in accordance with the MAC address of each of the bridges in the group.

{Note: Dutt et al, in the same field of endeavor, teach, "the Bridge ID is the MAC Address of the bridge." In Tsukakoshi et al, each bridge has a respective ID (MAC address), the bridge ID (MAC address) of each grouped bridge is 0 (see figure 2)}.

Allowable Subject Matter

6. Claims 11-15 are allowed over prior art.
7. Claims 2-5 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record does not teach or fairly suggests a bridge according to claim 1, wherein each BPDU includes a bridge identifier representative of the bridge which generated the BPDU wherein the processor is adapted to set the path cost component of the group port equal to zero and each time the bridge in the group of bridges receives a BPDU via a port other than the group port, to cause the bridge to generate and transmit a new BPDU to the group port, the new BPDU having the bridge identifier and the port identifier of the received BPDU.

The prior art made of record further fails to teach or fairly suggests in combination a group of bridges according to claim 7, wherein the STP uses a port

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identifier associated with each bridge port, the port identifier representing the priority of the port, and wherein the port identifier of each port in the bridge is stored in the store, and wherein the new BPDU is a group BPDU which further includes an indication of the port identifier of the bridge port at which the received BPDU was received wherein the port identifier are different for each bridge port of each grouped bridge as recited in claim 10.

Conclusion

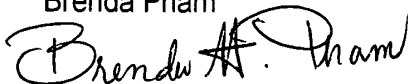
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

September 14, 2004

Brenda Pham

A handwritten signature in cursive script that reads "Brenda A. Pham". The signature is written in dark ink and is positioned below the printed name "Brenda Pham".